APPENDIX C
USE OF OTHER REGIONAL AIRPORTS

This appendix contains background material, which supplements the material contained in main body of the EIS, especially **Chapter 3, Alternatives.**

The Chicago area, like most major metropolitan areas in the United States, has multiple commercial service airports that could potentially serve a portion of the future regional aviation demand. In addition to the existing commercial service airports—O'Hare, Midway, Milwaukee, Gary, and Rockford—there is a proposal for a new airport (South Suburban Airport) in Peotone.

To evaluate the potential for the use of other regional airports to satisfy the purpose and need of the proposed O'Hare development, the following factors were analyzed:

- Multiple Airport Systems in the United States—data were compiled on major U.S. aviation markets served by multiple airports, in order to evaluate the regional distribution of market demand.
- Availability of Airports in the Chicago Area—information was compiled on the current and future availability of airport capacity at the commercial service airports in the Chicago area, in order to evaluate the potential to serve future demand forecast for O'Hare.
- Airline Service at Secondary Airports—case history data were compiled on airline start-up operations at secondary airports in major U.S. aviation markets, in order to evaluate the potential for use of secondary airports in the Chicago area.

On the basis of these factors, a scenario was developed to evaluate the potential use of other regional airports to accommodate the demand forecast for O'Hare and thereby satisfy purpose and need. The detailed analysis and evaluation are described below.

C.1.1 Multiple Airports Systems in the United States

In evaluating use of other airports as an alternative to enhancing capacity at O'Hare, it is helpful to consider how multiple airport systems have evolved in the nation. There are many regional aviation markets throughout the nation that support multiple commercial passenger airports. In 2002, 10 of the 15 largest air travel markets in the United States were served by more than one airport and seven (7) were served by three (3) or more secondary airports. **Exhibit C-1** through **Exhibit C-5** depict the top five market areas in the United States, showing the population densities and each of the airports serving these market areas.

Table C-1 shows the ranking of the largest 15 passenger markets in the United States. The passenger data shown are for local originating passengers—that is, excluding connecting passengers. Multiple airport systems can be reasonably expected to share in the service of local originating passenger demand. In terms of local originating passengers, as of 2002, the Chicago area was the third largest air travel market in the nation, following New York and Los Angeles.

Table C-1 also shows the number of significant commercial service airports in each market—defined for purposes of this analysis as airports with 10 percent or more of the regional traffic. While the total number of commercial airports is important in terms of the capacity to serve regional demand, the number of significant commercial airports is instructive in terms of airports that are actually used by airlines to serve a material portion of the regional demand. (Note: the availability of capacity at regional airports that are not significant in terms of their current utilization will be presented in the next section).

General conclusions that can be drawn from the data in **Table C-1** include:

- As of 2002, none of the top 15 US markets had more than 3 commercial service airports that each accommodated 10 percent or more of the regional demand.
- There is a clear correlation between regional market size and number of airports with significant commercial service/activity (10 percent or more of regional demand).

TABLE C-1
TOP 15 US MARKETS
(YEAR ENDED DECEMBER 31, 2002)

Rank	Top US Market Areas	Local Originating Passengers(a)	Number of Airports with 10% or More Regional Originating Passengers
1	New York	35,245,000	3
2	Los Angeles	30,837,000	3
3	Chicago	23,470,000	3
4	San Francisco	21,787,000	3
5	Washington, D.C.	19,562,000	3
6	Miami	19,232,000	3
7	Boston	14,567,000	3
8	Las Vegas	13,380,000	1
9	Atlanta	13,237,000	1
10	Orlando	12,583,000	1
11	Dallas/Fort Worth	12,313,000	2
12	Phoenix	10,325,000	1
13	Seattle/Tacoma	9,830,000	1
14	Denver	9,423,000	1
15	Houston	9,377,000	2

Notes: (a) The local originating passengers are shown for CY 2002.
Sources: US DOT Airline Passenger Origin and Destination Survey;
US DOT T-100 Onboard Database;
US DOT 298(c) Enplanement Database;
Leigh Fisher Associates Analysis [TPC], November 2004

Currently in the Chicago market, O'Hare International, Midway International, and General Mitchell International Airport in Milwaukee each accommodate at least 10 percent of regional demand. There is no current example in the United States for a region to be served by more than three airports each with a significant (10 percent or greater) market share. From this data, it is not reasonable to conclude that the Chicago area could be served by more than three airports, with each having 10 percent or more of the regional demand.

Table C-2 presents more detailed information on the ten largest multiple airport markets, showing the number of locally originating passengers and percentage shares of each airport within the market.

TABLE C-2
LOCAL PASSENGER SHARES OF INDIVIDUAL AIRPORTS IN MULTIPLE AIRPORT MARKETS
(YEAR ENDING DECEMBER 31, 2002)

Market-Airport	Airport Code	Originating Passengers	Share of Local Passengers
#1 New York			
John F. Kennedy International	JFK	11,873,000	34%
Newark Liberty International	EWR	11,365,000	32%
LaGuardia	LGA	10,559,000	30%
Islip-McArthur	ISP	970,000	3%
Westchester County	HPN	478,000	1%
Total		**35,245,000**	100%
#2 Los Angeles			
Los Angeles International	LAX	20,842,000	68%
John Wayne	SNA	3,938,000	13%
Ontario International	ONT	3,077,000	10%
Burbank-Glendale-Pasadena	BUR	2,286,000	7%
Long Beach	LGB	694,000	2%
Total		**30,837,000**	100%
#3 Chicago			
O'Hare International	ORD	15,556,000	66%
Midway International	MDW	5,574,000	24%
Milwaukee – General Mitchell	MKE	2,330,000	10%
Gary / Chicago International	GYY	9,000	0%
Rockford	GRA	1,000	0%
Total		**23,470,000**	100%
#4 San Francisco			
San Francisco International	SFO	10,912,000	50%
Oakland International	OAK	5,885,000	27%
San Jose- Mineta International	SJC	4,990,000	23%
Total		**21,787,000**	100%
#5 Washington D.C.			
Baltimore-Washington International	BWI	7,961,000	41%
Washington-Dulles	IAD	5,912,000	30%
Washington-Reagan	DCA	5,689,000	29%
Total		**19,562,000**	100%
#6 Miami			
Miami International	MIA	8,581,000	45%
Fort Lauderdale – Hollywood International	FLL	7,943,000	41%
Palm Beach International	PBI	2,708,000	14%
Total		**19,232,000**	100%
#7 Boston			
Boston-Logan	BOS	10,187,000	70%
Providence-T.F. Green	PVD	2,670,000	18%
Manchester	MHT	1,675,000	11%
Worchester	ORH	35,000	0%
Total		**14,567,000**	100%
#8 Orlando			
Orlando International	MCO	12,222,000	97%
Sanford	SFB	361,000	3%
Total		**12,583,000**	100%
#9 Dallas/Fort Worth			
Dallas / Fort Worth International	DFW	10,103,000	82%
Dallas-Love Field	DAL	2,210,000	18%
Total		**12,313,000**	100%

TABLE C-2
LOCAL PASSENGER SHARES OF INDIVIDUAL AIRPORTS IN MULTIPLE AIRPORT MARKETS
(YEAR ENDING DECEMBER 31, 2002)

Market-Airport	Airport Code	Originating Passengers	Share of Local Passengers
#10 Houston			
Houston -Intercontinental	IAH	6,843,000	69%
Houston-Hobby	HOU	2,854,000	30%
Ellington Field	EFD	40,000	0%
Total		**9,377,000**	100%

Sources: USDOT Airline Passenger Origin and Destination Survey;
USDOT T-100 Onboard Database;
USDOT 298 (c) Enplanement Database;
Leigh Fisher Associates Analysis.

Key observations from the data in **Table C-2** are:

- The share of local traffic served by the largest airport in each market ranges from a low of 34 percent (JFK in New York) to a high of 97 percent (Orlando International in Orlando). In 7 of the 10 markets, the largest airport share is 50 percent or more.
- The current O'Hare share of the Chicago market (66 percent) is in the middle of the range of the markets shown.
- In markets with airports serving as major transcontinental hubs (Chicago, Dallas-Fort Worth, and Houston), the share of traffic at the largest airport is at or above the average. This is attributed to the fact that major connecting hubs need a significant amount of local traffic as a base to support the investment in facilities to support connecting traffic.

An overall conclusion from review of these data for multiple airport markets is that the shares of traffic by airport vary considerably, and are substantially dependent on the unique circumstances of each market—characteristics of demand, geographic location, airport capacity, etc. Therefore, it is not possible to directly conclude what might be reasonable to expect in the Chicago area. However, the data does provide an "envelope" of possibilities for the future development of the system of airports in the Chicago area. In particular, it is possible that other airports in the Chicago area could take more local demand, and that the share of local demand at O'Hare could be less than the 66 percent recorded in 2002. However, this potential for increasing share at other airports is limited by the fact that O'Hare is a major trans-continental hub relying on local demand.

To develop more specific conclusions regarding the potential for other regional airports to serve local demand, it is necessary to examine: (a) the availability of airport capacity in the area, and (b) the circumstances under which one or more airlines would initiate service at a secondary airport.

C.1.2 Available Airports in the Chicago Region

There are 44 airports[1] within approximately 75 statute miles of O'Hare.[2] However, of these airports, only four (4) existing and one (1) proposed have the basic infrastructure required to support a significant level of commercial passenger service: (1) Chicago Midway International Airport; (2) Gary/Chicago International Airport; (3) Greater Rockford Airport; (4) Milwaukee General Mitchell International Airport; and (5) the proposed South Suburban Airport. This section reviews the capacity and demand profile for each airport to determine if capacity is available in the future to accommodate additional activity. It also reviews the general layout and environs for each airport to provide further insight into potential development constraints.

Table C-3 provides a comparison of the projected activity levels for each of the five airports relative to their current and projected Annual Service Volume (ASV)[3] for the key planning periods through 2018. The table shows that Midway would reach or exceed its ASV unless improvements are undertaken to increase capacity.

While Milwaukee, Rockford and Gary/Chicago each have capacity that could be available to support future commercial activity, presently Rockford and Gary/Chicago both have surplus capacity and to date have had little to no impact on commercial activities at O'Hare. Additionally, the South Suburban Airport could also have surplus capacity if built.

TABLE C-3
ESTIMATED UNUSED CAPACITY AT REGIONAL AIRPORTS BASED ON ASV

Airport	2018 Forecast (a)	Annual Service Volume (ASV)	Estimated Unused Capacity based on ASV (operations)
Existing Airports			
Midway (MDW)	453,000	295,000 (b)	-
Gary / Chicago (GYY)	57,400	225,000 (b)	167,600
Greater Rockford (RFD)	89,700	215,000 (c)	125,3000
Milwaukee (MKE)	295,200	350,000 (d)	54,800
Proposed Airports			
South Suburban	55,400 (e)	240,000 (e)	184,600

Notes: (a) Except as noted, 2018 activity forecasts are from the 2002 FAA Terminal Area Forecast. Years are fiscal.
(b) TPC analysis using FAA AC 150 / 5060-5, Airport Capacity and Delay, based on existing conditions at those airports.
(c) Greater Rockford Airport Master Plan Study, 1993.
(d) General Mitchell International Airport, Master Plan Update, Table 4.1-6, October 27, 2003.
(e) High-range estimate of Date of Beneficial Occupancy (DBO)+10 forecast, Projections of Aeronautical Activity for the Inaugural Airport Program South Suburban Airport, May 11, 2004.

[1] This estimate includes public use airports with at least one paved runway.
[2] This estimate is based on information obtained from www.airnav.com.
[3] Annual Service Volume (ASV) is an estimate of an airport's annual capacity. It accounts for differences in runway use, aircraft mix, weather conditions, etc., that would be encountered over one year's time.

Exhibits C-1 through **C-5** provide the background data used in the development of **Table C-3.** These exhibits on the following five (5) pages show the capacity characteristics (demand versus capacity) for each individual regional airport with the potential to offer additional levels of commercial service. The 60 percent line on the exhibits denotes the operational level relative to the ASV activity level. The 60 percent level is the level at which planning for capacity improvement would normally commence. The 80 percent line indicates the capacity level at which capacity improvements would normally be under construction. Capacity improvements are typically constructed prior to reaching 100 percent of the ASV to minimize the construction impacts experienced while bringing the new improvements on-line and to accommodate fluctuations in demand levels.

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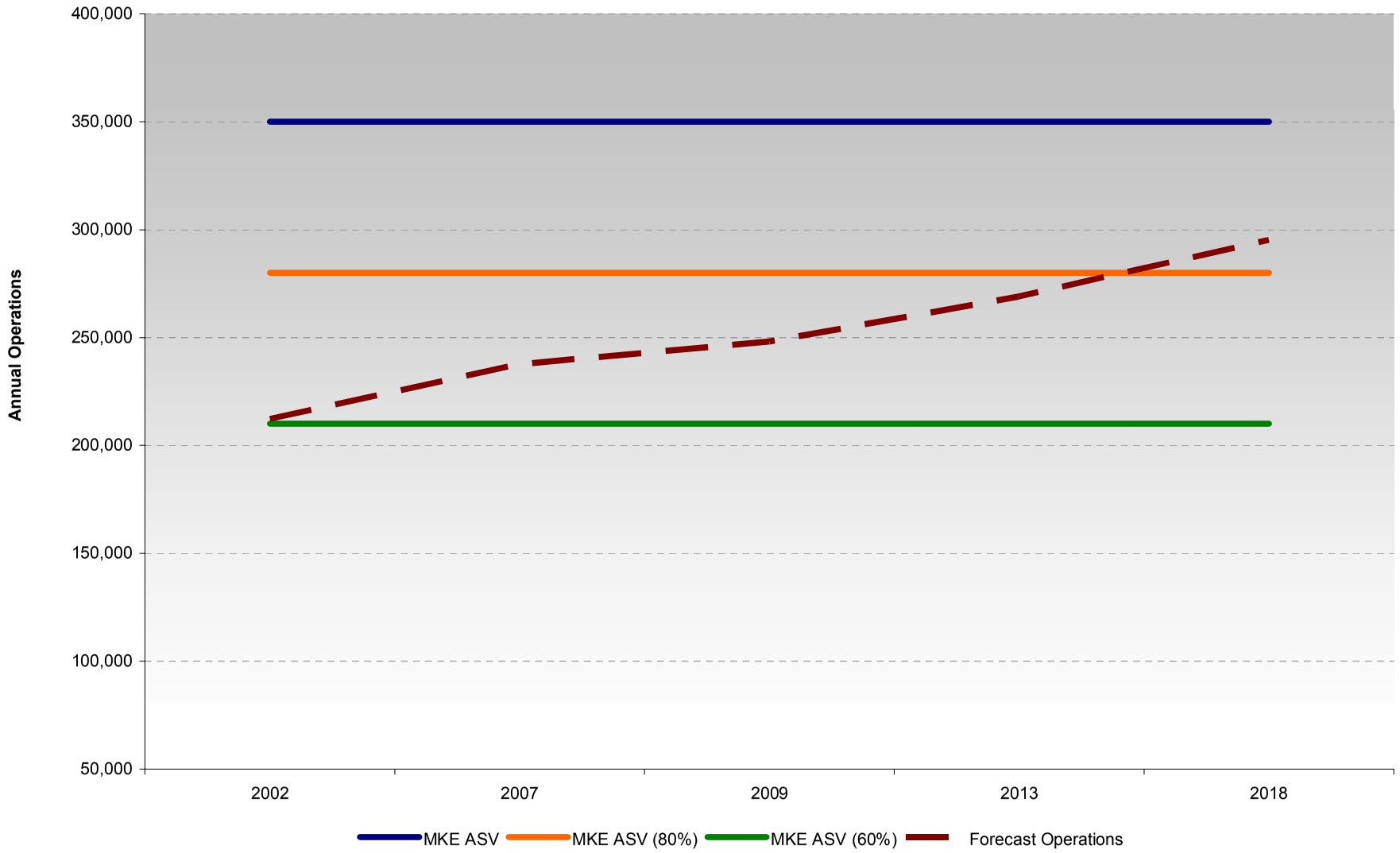

Note: ASV = Average Service Volume

Source: Crawford, Murphy and Tilly, Inc.[TPC], Analysis 2004.

Airfield Capacity and Aircraft Operation Forecast at Milwaukee General Mitchell International Airport

▶ Exhibit C-1

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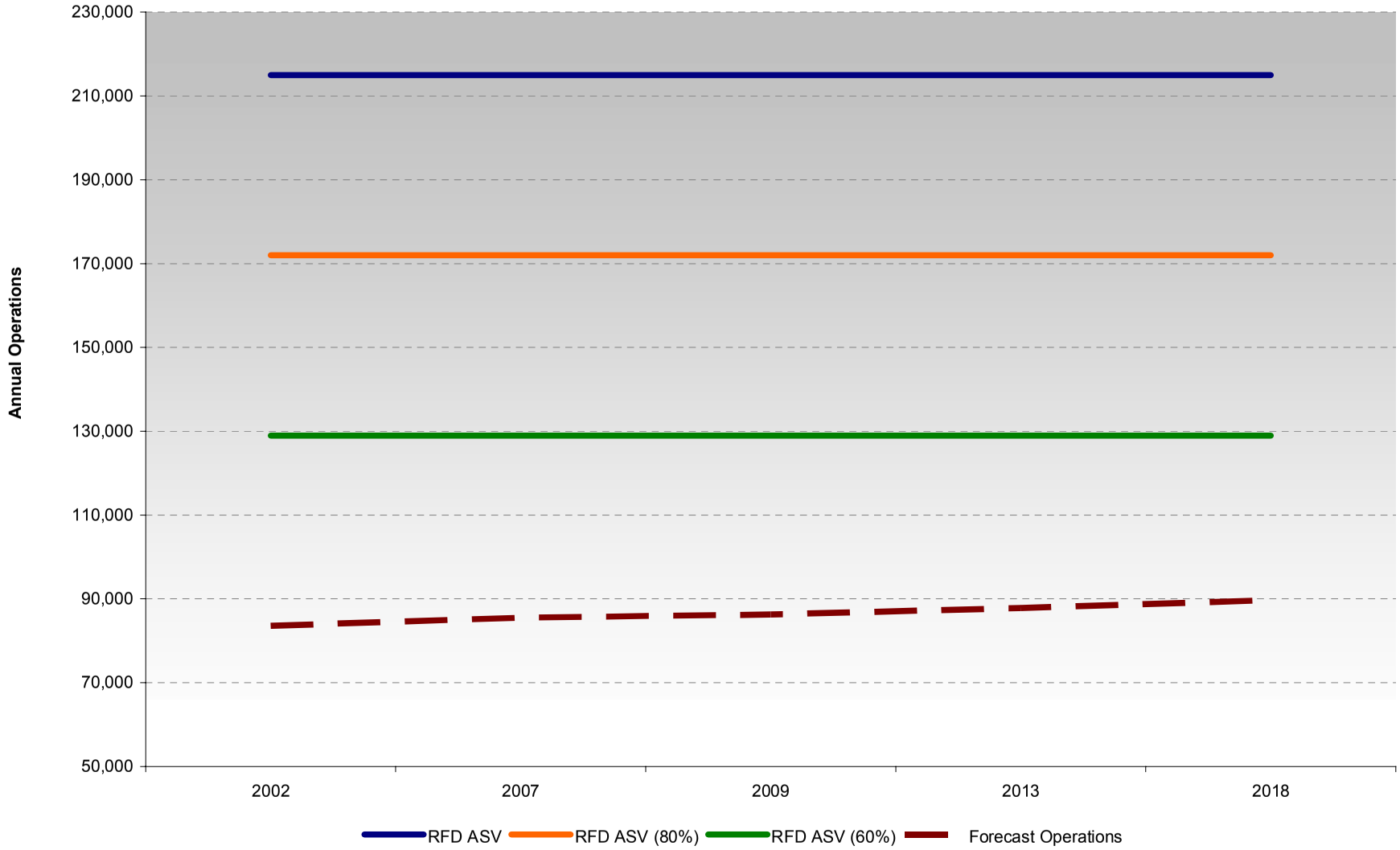

Note: ASV = Average Service Volume

Source: Crawford, Murphy and Tilly, Inc.[TPC], Analysis 2004.

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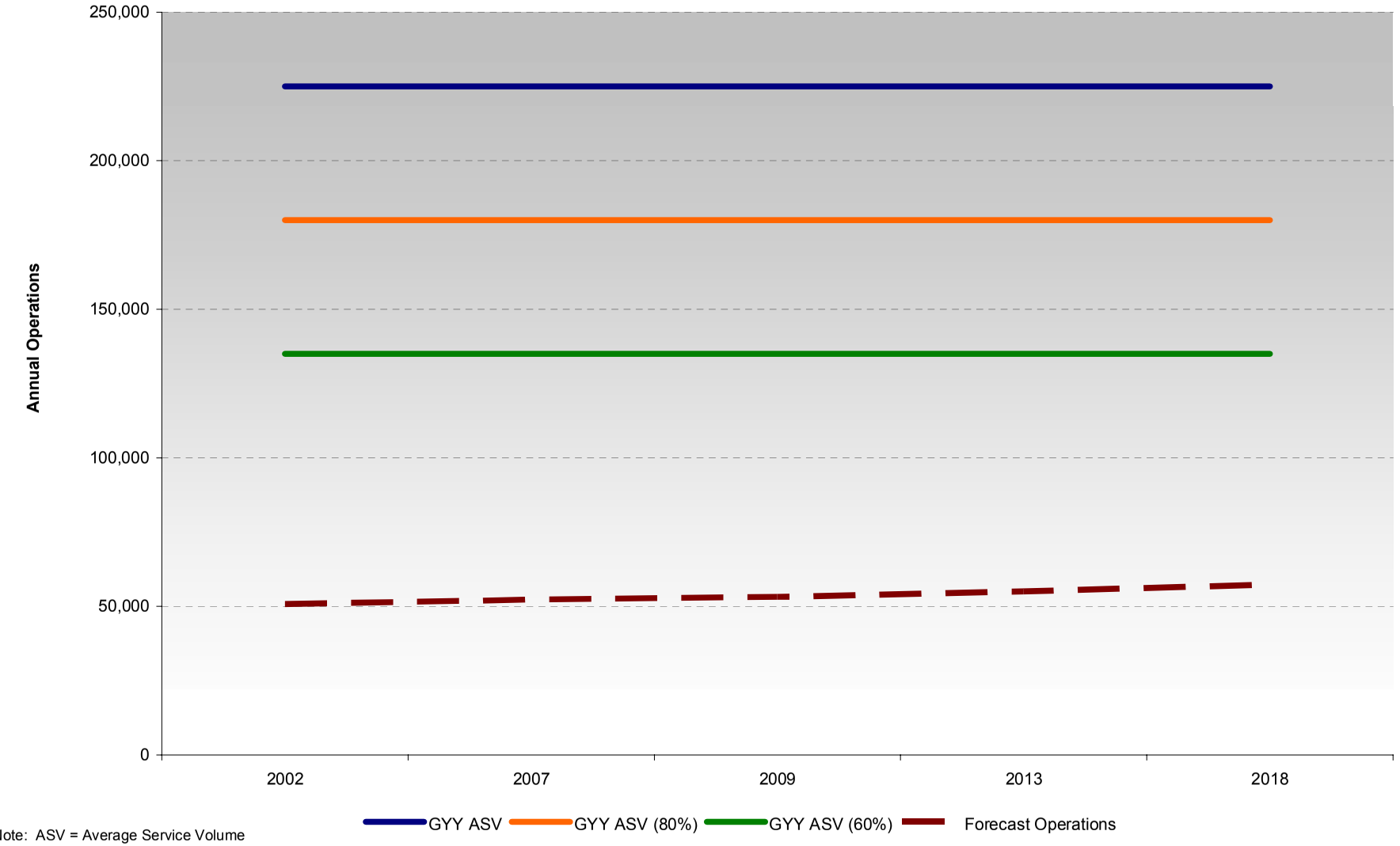

Note: ASV = Average Service Volume

Source: Crawford, Murphy and Tilly, Inc.[TPC], Analysis 2004.

Chicago O'Hare International Airport

O'Hare Modernization Environmental Impact Statement

Airfield Capacity and Aircraft Operation Forecast at Gary/Chicago International Airport

▶ Exhibit C-3

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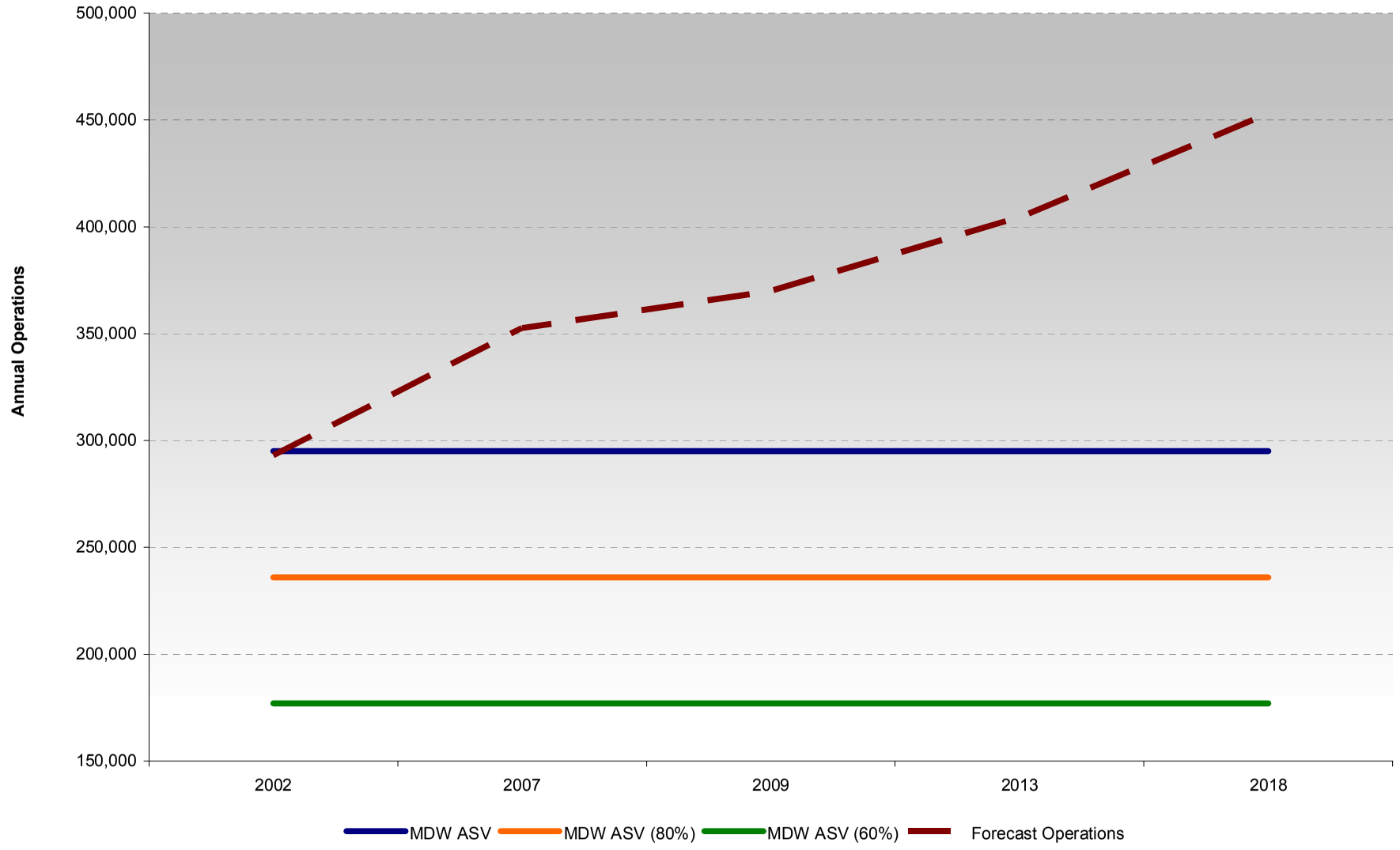

Note: ASV = Average Service Volume

Source: Crawford, Murphy and Tilly, Inc.[TPC], Analysis 2004.

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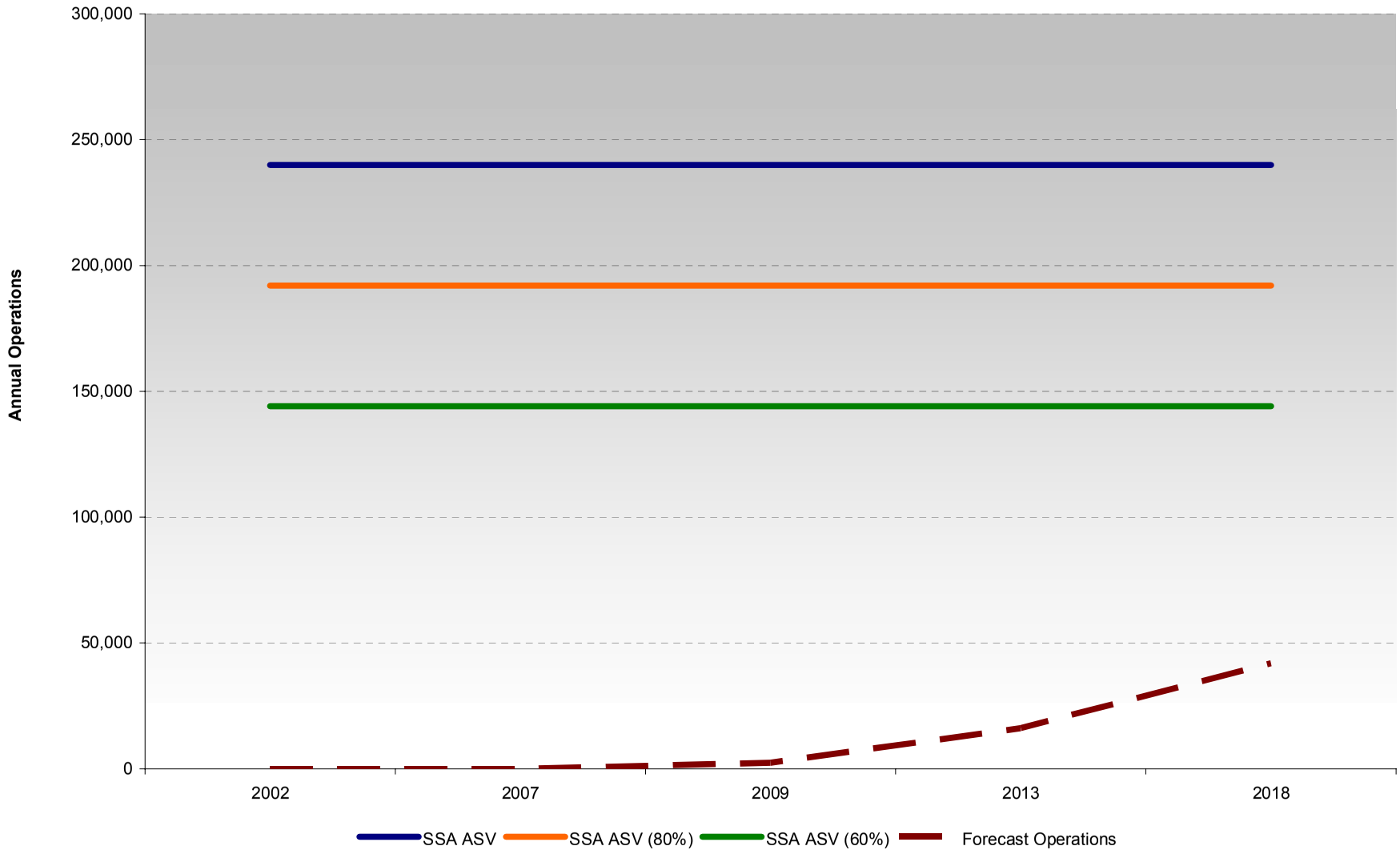

Note: ASV = Average Service Volume

Source: Crawford, Murphy and Tilly, Inc.[TPC], Analysis 2004.

Airfield Capacity and Aircraft Operation Forecast at Proposed South Suburban Airport

▶ Exhibit C-5

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C.1.2.1 Chicago Midway International Airport

Chicago Midway International Airport (MDW), owned by the City of Chicago, is one of the fastest growing commercial service airports in the nation and is classified by the FAA as a large hub. MDW complements O'Hare by providing service by low-fare airlines that offer point-to-point service to local passengers. Short-haul international service is also provided. In 2002, MDW accommodated about 293,000 aircraft operations.[4]

As a result of the recent significant growth in activity, improvements at MDW have included the recently completed two-level terminal facility on the east side of Cicero Avenue, opposite the airfield. In conjunction with the development of the new terminal, a new access roadway system with separate curb fronts for arriving and departing passengers has been constructed. A new two-level concourse and gate facility is connected to the terminal by a pedestrian bridge that crosses Cicero Avenue. The original terminal plan called for 41 gates (the old terminal had 29), however a change occurred during construction with two gates being added with construction of the "banana" concourse annex. This resulted in 43 gates being available from the Concourse facility on the west side of Cicero Avenue. The Concourse facility also includes a Federal Inspection Service (FIS) area.

Aircraft demand at MDW is expected to exceed its operational capability during the planning horizon. Based on current air traffic procedures, the airfield at MDW can process about 295,000 total annual aircraft operations (including air cargo and general aviation operations).[5] Based upon the 2002 FAA TAF, this level of operations has already been exceeded.[6] While activity could exceed the annual service volume (ASV), delays would increase exponentially as activity levels approach or exceed the ASV.

MDW is surrounded by commercial development, residential communities, and transportation facilities. There are currently no plans to expand the airfield for increased capacity. **Exhibit C-6** depicts the existing Midway International Airport.

C.1.2.2 Gary/Chicago International Airport

In 1995, the City of Chicago and the City of Gary, Indiana, signed an agreement establishing the Chicago/Gary Regional Airport Authority. This agreement provides for certain coordination in development and operation between O'Hare, Midway, and the Gary/Chicago International Airport (GYY). GYY is situated in Lake County, Indiana, about 25 miles southeast of the Chicago Central Business District. GYY has had commercial service intermittently in recent years and for some time has actively pursued air carriers to establish and expand service. The Airport currently provides commercial service to several locations. In 2002, GYY accommodated about 50,800 aircraft operations (including air cargo, military, and general

[4] 2002 Terminal Area Forecast, Federal Aviation Administration, Years are fiscal.
[5] TPC analysis using FAA AC150/5060-5, Airport Capacity and Delay, based on existing conditions at the airport.
[6] The 2002 Terminal Area Forecast projects that approximately 352,700 operations will occur at Midway in FY 2007.

aviation operations).[7] Additionally, regularly scheduled bus service provides approximately 18 round trips daily from Gary, Indiana to O'Hare International Airport.[8]

A Final Environmental Impact Statement for proposed improvements at the Gary/Chicago International Airport was signed on October 8, 2004. A notice of availability was published on October 19, 2004.[9] The Final EIS states,

> The Gary/Chicago Airport Authority, operator of the Gary/Chicago International Airport, submitted an Airport Layout Plan for various items listed in the Airport Authority's 2001 Master Plan to address enhancements to the Runway Safety Area [RSA] of Runway 12-30 to bring the runway into compliance with current FAA design standards. Also addressed are other improvements to the airport recommended in the 2001 Master Plan and a Railroad Relocation Study. These improvements include: Improvements to existing Runway 12-30 to conform with current FAA Standards, the primary air carrier runway at the Gary/Chicago International Airport: acquire land northwest of airport to allow for modifications to runway safety area (RSA); relocate EJ&E Railway, with phased relocation including possible north shift alternative that is under consideration; modify ongoing cleanup activities for compatibility; relocate airside perimeter roadway with security fencing (including addition of southwest access road) with phased relocation; bury transmission line; extend Runway 12 to the northwest (approximately 546 feet by 150 feet); relocate Runway 12-30 navaids; improve/grade RSA for Runway 12 (approximately 1,100 feet); relocate Runway 12 threshold to remove prior displacement; displace Runway 30 threshold using declared distance standards approximately 546 feet to the northwest to improve Runway 30 RSA; extend parallel Taxiway A to new end of Runway 12; and acquire land southeast of airport, located within or immediately adjacent to runway protection zone (RPZ). Improvements to provide additional runway length on Runway 12-30 (proposed to occur simultaneously with and requiring accomplishment of the improvements to conform to FAA standards described above): acquire additional land or rights northwest of existing runway; extend Runway 12-30 to the northwest (up to approximately 1,354 feet by 150 feet); relocate Runway 12 navaids; extend parallel Taxiway A to new end of Runway 12; construct deicing hold pads on Taxiway A at the ends of Runway 12 and Runway 30; develop two high-speed exit taxiways; improve/grade extended Runway 12 safety area (approximately 1,100 feet); relocate Runway 12 threshold to end of extended runway pavement. Expansion of existing passenger terminal and apron to accommodate projected demands, based upon the low case forecast, through the year 2020. Analysis of site(s) adjacent to extended Runway 12-30 to preserve flexibility and land-use compatibility for potential aviation related development, including new passenger terminal and air cargo areas, and to allow acquisition and/or reservation of these areas for the long term.[10]

A notice of availability of the Record of Decision (ROD) for proposed improvements at the Gary/Chicago International Airport was published on March 24, 2005.[11] By 2018, the TAF indicates that GYY is expected to accommodate approximately 57,400 annual operations, an increase of 13 percent over current levels.[12] Long-range planning studies indicate that the existing ASV of the airport is approximately 225,000 annual aircraft operations.[13] Therefore, it is

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7 2002 Terminal Area Forecast, Federal Aviation Administration, Years are fiscal.
8 http://www.busville.com/schedule.cfm?ID=130
9 The Notice of Availability for the Gary/Chicago International Airport Final EIS, FAA, Federal Register, Volume 69, October 19, 2004.
10 Gary/Chicago International Airport Final EIS, coversheet, FAA, October 8, 2004.
11 The Notice of Availability for the Gary/Chicago International Airport Record of Decision, FAA, Federal Register, Volume 70, Number 56, March 24, 2005.
12 2002 Terminal Area Forecast, Federal Aviation Administration, Years are fiscal.
13 TPC analysis using FAA AC150/5060-5, Airport Capacity and Delay, based on existing conditions at the airport.

estimated that, by 2018, GYY could accommodate about 167,600 additional annual aircraft operations.

GYY currently comprises 670 acres. The airport is surrounded by natural and man-made barriers. Along the airport's southern boundary the Grand Calumet River and Interstate 90 (I-90) run east-west, to the west the rail spur for Elgin Joliet and Eastern runs north-south intersecting Industrial Highway to the north and I-90 to the south. To the north and east, the airport is bordered by Industrial Highway, a main arterial road, which parallels the airport property to the north and west. **Exhibit C-7** depicts the existing Gary/Chicago International Airport.

C.1.2.3 Greater Rockford Airport

The Greater Rockford Airport (RFD) is located approximately 80 miles northwest of the Chicago Central Business District. RFD currently provides commercial service to several locations. RFD is also home to United Parcel Service's (UPS) second largest air hub sorting facility and currently ranks 23rd in the nation in terms of cargo landed weight. RFD currently has two intersecting runways, the longest of which is 10,000 feet with a Category III instrument landing system. Because of these capabilities, aircraft are sometimes diverted from O'Hare to RFD during poor weather conditions. Additionally, regularly scheduled bus service provides approximately 17 round trips daily from Rockford, Illinois to O'Hare International Airport.[14]

In 2002, RFD accommodated about 83,600 operations (including air cargo and general aviation operations). By 2018, FAA predicts that activity at that airport could increase to approximately 89,700 annual operations, a 7 percent increase.[15]

Over the last decade, the FAA has invested approximately $50 million to enhance the operational capacity and provide for future growth at RFD. Development has included significant airside and landside improvements including terminal building expansion, runway extensions, apron expansions, airfield safety area improvements, additional airfield navigational aids, and roadway relocations.

The Airport Master Plan for future development is currently being updated. This proposed update includes a new parallel runway to the primary runway and associated safety area improvements. It is estimated that the existing ASV of the airport is approximately 215,000 annual operations, and planned improvements could increase that level to about 260,000.[16] With planned improvements, it is estimated that the airport could therefore accommodate about 170,300 additional annual aircraft operations by 2018.

There are land constraints at RFD that would make major future capacity improvements more costly. The Rock River forms the airports northern and western property boundary limit. To the east, Burlington Northern has a rail spur which runs along the airports eastern property boundary. East of the rail spur is mixed development, which includes commercial, retail and

[14] http://www.vangalderbus.com/schedule/oharerockford.asp
[15] 2002 Terminal Area Forecast, Federal Aviation Administration, Years are fiscal.
[16] Greater Rockford Airport Master Plan Study, 1993.

residential properties. To the south, Belt Line road borders the airport property while the Kishwaukee River just to the south winds just outside the airport property boundary and joins the Rock River to the west. **Exhibit C-8** depicts the existing Greater Rockford Airport.

C.1.2.4 General Mitchell International Airport

General Mitchell International Airport (MKE), owned and operated by Milwaukee County, is located in Milwaukee, Wisconsin, approximately 85 miles north of the Chicago Central Business District. MKE is a medium-hub commercial service airport that provides non-stop or direct service to over 90 cities. The Airport currently has five runways, including two sets of parallels and a passenger terminal facility with 42 gates. In 2002, about 212,200 aircraft operations were accommodated at MKE. By 2018, the FAA forecasts that activity could increase to approximately 295,200 aircraft operations, an increase of 39 percent.[17]

MKE is updating its Airport Master Plan, which will address the type and extent of facilities required to meet future demand. This plan is expected to include airside and landside improvements, terminal building improvements, and land acquisition for future expansion. The current airside proposal includes the extension of two existing runways and construction of a new 7,000-foot third parallel runway. The current ASV of the airport is approximately 350,000 annual operations,[18] and planned improvements, if implemented, are expected to substantially increase the airport's ASV.

MKE is constrained by commercial and industrial developments to the east and west of the airport, residential housing to the north and south, city streets and a railroad spur. The airport is only 5 nautical miles south of the Milwaukee central business district in a densely developed area of the city. **Exhibit C-9** depicts the existing General Mitchell International Airport.

[17] 2002 Terminal Area Forecast, Federal Aviation Administration. Years are fiscal.
[18] General Mitchell International Airport, Master Plan Update, October 27, 2003.

Source: Aerial Express, September 2002.

Chicago O'Hare International Airport

O'Hare Modernization Environmental Impact Statement

Chicago Midway International Airport

▶ Exhibit C-6

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Source: Aerial Express, September 2002.

Chicago O'Hare International Airport

O'Hare Modernization Environmental Impact Statement

Gary/Chicago International Airport

▶ Exhibit C-7

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Source: Aerial Express, September 2002.

Chicago O'Hare International Airport

Greater Rockford Airport

O'Hare Modernization
Environmental Impact Statement

▶ **Exhibit C-8**

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Source: Wisconsin Department of Transportation, June 7, 2002.

Chicago O'Hare International Airport

O'Hare Modernization Environmental Impact Statement

Miwaukee General Mitchell International Airport

▶ Exhibit C-9

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C.1.2.5 Proposed South Suburban Airport

The State of Illinois is proposing to build a new commercial service airport, known as the South Suburban Airport (SSA), near Peotone, Illinois. On July 28, 2000, the FAA published a Notice of Intent (NOI) to prepare a tiered EIS for FAA site approval and the proposed acquisition of land by the State of Illinois. The proposed action reviewed in the SSA Tier 1 EIS was FAA's site approval to preserve the option of developing a potential, future air carrier airport to serve the greater Chicago Market Area as determined necessary and appropriate to meet future aviation capacity needs. Site approval for the future option allowed for land acquisition prior to the site undergoing suburban development. At a later date, it will be determined how market demands would be met. The FAA's proposed site approval was based upon the continuing need to protect the airspace and preserve a technically feasible site from encroachment by suburban development. On July 12, 2002, the FAA issued a Record of Decision on the SSA Tier 1 EIS.[19]

On October 28, 2003, the FAA issued a NOI to prepare a Tier 2 EIS for the first phase of construction and operation of Inaugural Airport Facilities.[20] Environmental scoping meetings were held in December 2003. The proposed Federal action under consideration in this Tier 2 EIS is approval of an ALP for development of an inaugural air carrier airport at the FAA approved site. It is the State of Illinois' intent that this airport serve the forecast needs of air carrier passengers, cargo, and general aviation within the south suburban area and provide the opportunity for future expansion. Evaluation of future SSA improvements to address the long-term needs of the greater Chicago Market Area beyond an inaugural facility, including appropriate environmental studies, would be undertaken if and when these needs arise.

Although the Tier 1 EIS, herein incorporated by reference, addresses FAA site approval and Illinois Department of Transportation (IDOT) land acquisition to preserve the option of development of a potential supplemental air carrier airport, it does not define how future regional capacity needs would be met. The State of Illinois forecast of aviation demand for SSA was developed using Planning Horizon Years (PHY) that relate to the Date of Beneficial Occupancy (DBO), the opening day of the airport.[21] The "base case" forecast of aviation demand for SSA at DBO+1 is approximately 2,400 aircraft operations, growing to approximately 16,200 operations by DBO+5. The forecast for these two PHYs were developed to evaluate near-term facility requirements and environmental impacts for the EIS and the ongoing Master Plan Study. A long-range forecast (DBO+20) was also developed for the purposes of cumulative impact analysis and NEPA and FAA guidelines. The SSA long-range forecast (DBO+20) of aviation activity ranges between 56,200 (low) and 150,100 (high) operations, but this demand would ultimately be driven by market forces and other factors such as: 1) type of airline service

[19] Record of Decision for Tier 1: FAA Site Approval and Land Acquisition by the State of Illinois, Proposed South Suburban Airport, U.S. Department of Transportation, Federal Aviation Administration, July 12, 2002.

[20] Notice of Intent to Prepare a Tiered Environmental Impact Statement and Conduct Environmental Scoping for the Construction and Operation of Inaugural Airport Facilities by the State of Illinois for the South Suburban Airport, Federal Register, Volume 68, Number 208, October 28, 2003.

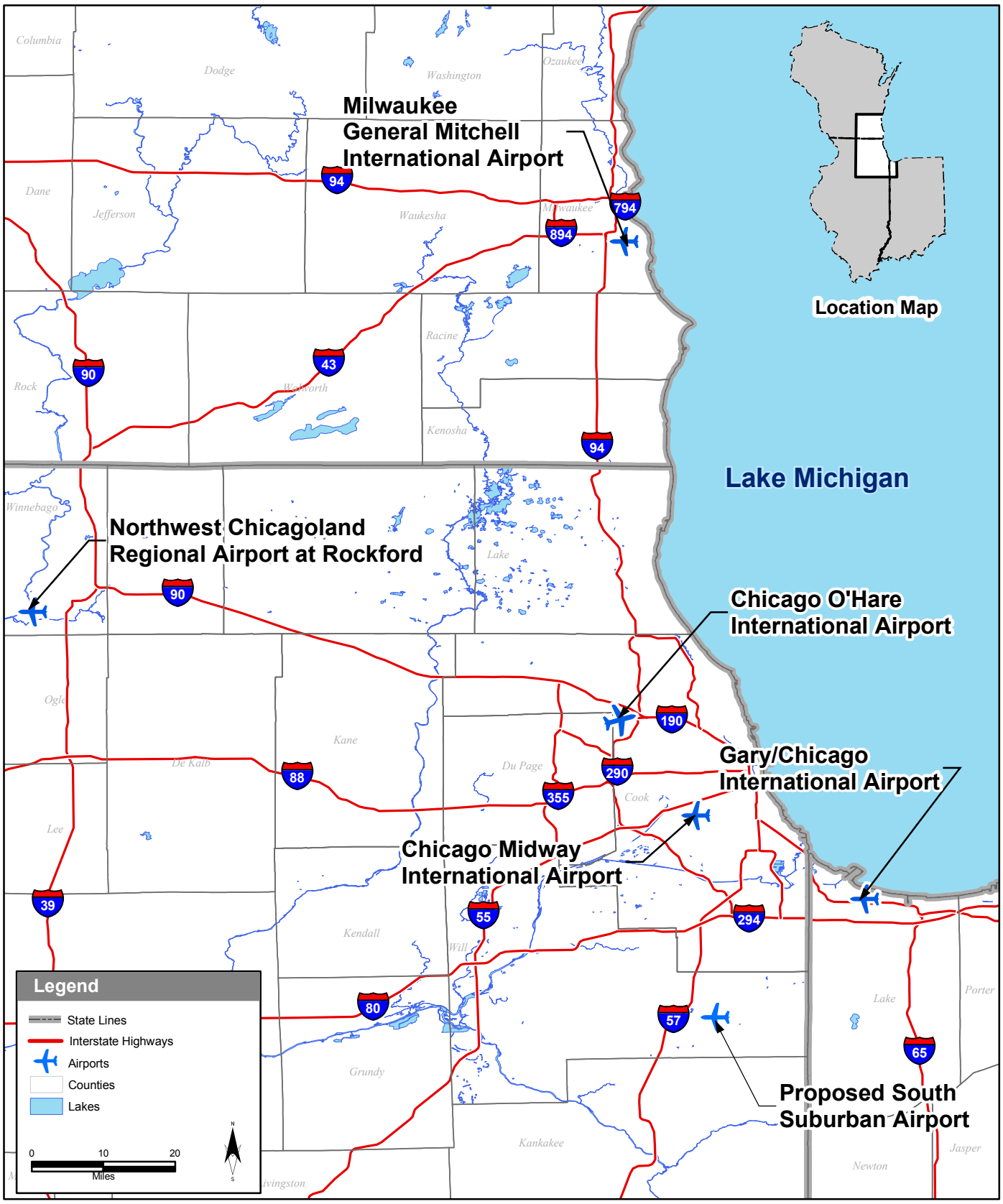
[21] Draft - Projections of Aeronautical Activity for the Inaugural Airport Program South Suburban Airport, Illinois Department of Transportation, May 11, 2004.

that develops; 2) airside and landside facilities that are constructed, 3) ability to adapt to potential airline requirements, and 4) vitality of the local and national economy.[22]

The potential primary passenger market area that fueled the SSA forecast was defined as: 1) a 45-minute drive from SSA, with the portion that overlapped the Midway service area excluded, and 2) must be located closer to SSA than either Midway or O'Hare. It was assumed in the State's SSA forecast that during the first five years of operation (DBO+1 to DBO+5), there would be a gradual development of the passenger service market, but no passengers would come from the service areas of Midway or O'Hare. After DBO+5, the airport could begin to compete with other commercial airports, and that market forces would ultimately drive aviation demand at SSA.

Exhibit C-10 depicts the proposed location of the South Suburban Airport.

[22] Draft - Projections of Aeronautical Activity for the Inaugural Airport Program South Suburban Airport, Illinois Department of Transportation, May 11, 2004.



Source: StreetMap USA 2003

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C.1.2.6 Summary of Available Airports in the Chicago Region

Collectively, the existing regional airports described above are expected to have capacity to accommodate additional regional aviation demand through the planning period (2018). Much of this capacity is already available. A new inaugural South Suburban Airport could increase the collective airfield capacity of the regional airports. Accordingly, these airports could accommodate new or additional airline service, potentially relieving demand at O'Hare and reducing the need for proposed airport improvements. However, as is the case at airport systems throughout the nation, the availability of capacity at particular airports does not alone guarantee that regional demand would be accommodated. Airlines are free to choose which airports to serve, and to date the availability of excess regional capacity has had little impact on commercial activity at O'Hare. Therefore, it is important to consider airline strategic objectives and the likelihood that airlines would utilize the capacity of other airports in the region. This is discussed in the following section.

C.1.3 Airline Service at Secondary Airports

While it is not possible to predict or direct the pattern of air service in a multiple airport market such as Chicago, it is possible that new or expanded air service could be initiated at one or more of the regional airports besides O'Hare. Such new service might in turn reduce demand at O'Hare.

The Federal government does not control where, when, and how airlines provide their services; nor is the Federal government the driving force in airport capacity development or airport utilization. Rather, the aviation industry, in partnership with local and regional government, and in response to market demand, drives where and how air travel demand is accommodated. *Airport Systems – Planning, Design, and Management* by de Neufville and Odoni states that:

> Market dynamics provide the basic explanation of the level and distribution of traffic among airports in a multi-airport system. Technical factors, political considerations and chance do modulate the effects of the market. However, the competitive market forces define the underlying structure of the outcomes. In brief, the competition of the providers of airport services for customers concentrates services for any market at specific airports.[23]

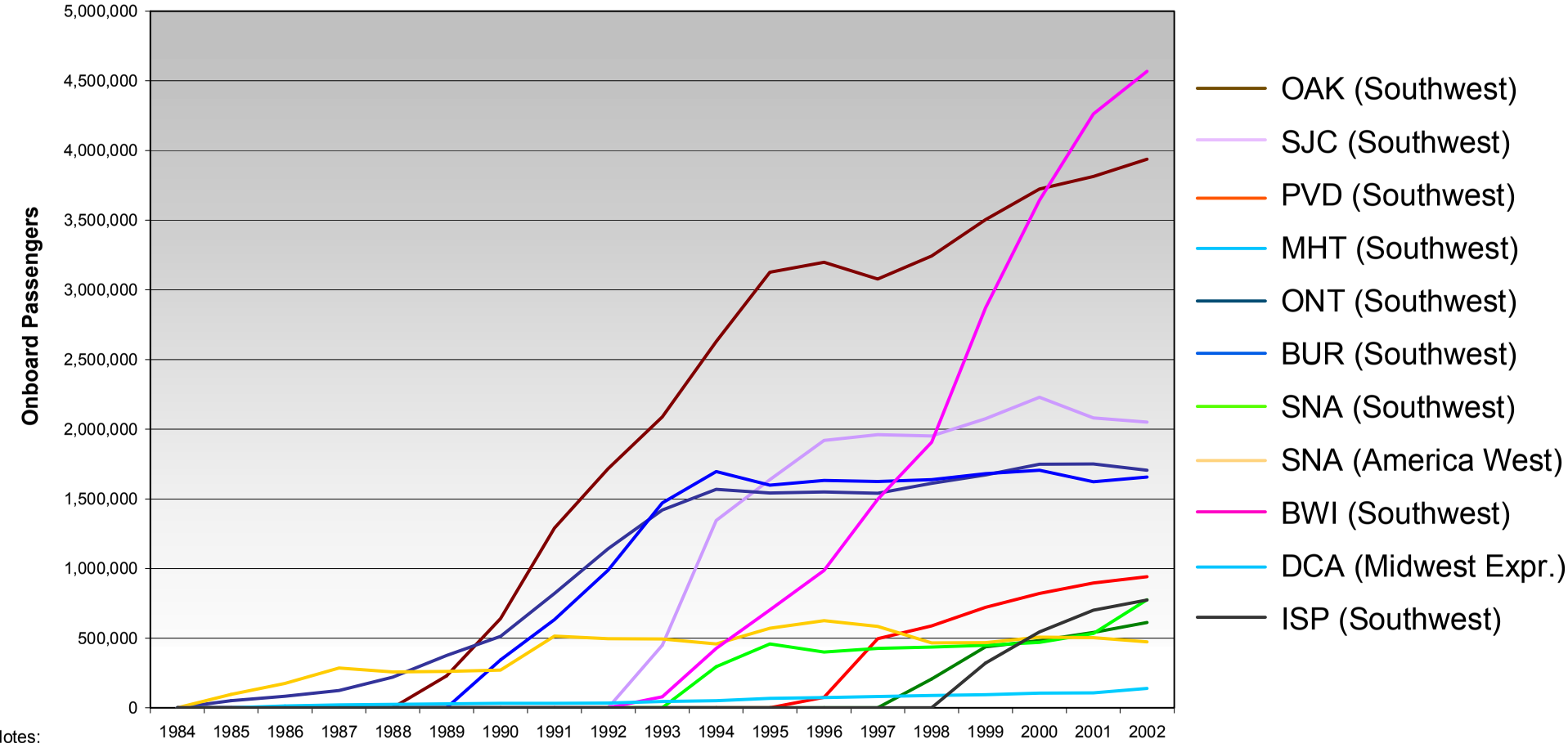
One way to examine the possible start-up of new airline service at other regional airports is to examine the history of new airline service at other airports. The characteristics of new entrant carriers and their effect on the multiple airport system at five locations in the U.S. were examined to provide examples that might be applicable to the consideration of potential changes in the Chicago market. These air travel markets include: New York, San Francisco, Los Angeles, Boston, and Washington, D.C. **Exhibit C-11** shows the growth profiles following the introduction of new passenger service at several airports within these market areas.

It should be noted that the Chicago market already has a strong secondary airport – Midway – which has benefited from the introduction of new service over the past decade, primarily from

[23] de Neufville, R. and Odoni, A., Airport Systems – Planning, Design, and Management, 2003.

low-cost carriers. As such, Midway currently accommodates approximately 5.6 million local passengers, or about 25 percent of the local Chicago market. It is anticipated that Midway will continue to provide the same types of air service currently offered and will remain the second largest airport in the region; however, it is also recognized that constraints at Midway will most likely limit its ability to increase its share of the regional market. With the largest secondary airport in the region therefore established, the purpose of this analysis is to determine the potential for the remaining, smaller secondary airports to attract and maintain a significant share of the region's local traffic.

Departing Domestic Onboard Passengers for Start-Up Carrier at Secondary Airports in Large Metropolitan Regions



Notes:

Airport Identifiers: OAK: Metropolitan Oakland International Airport SJC: Norman Y. Mineta San Jose International Airport PVD: Theodore Francis Green State Airport MHT: Manchester Airport ONT: Ontario International Airport BUR: Bob Hope Airport SNA: John Wayne-Orange County Airport BWI: Baltimore-Washington International Airport DCA: Ronald Reagan Washington National Airport ISP: Long Island Mac Arthur Airport

Airlines: Southwest Airline, America West Airline, Midwest Expess Airline

Source: Crawford, Murphy and Tilly, Inc.[TPC], Analysis. USDOT T-100 Onboard Database.

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The following case studies serve as examples where new service was introduced at one or more "smaller" secondary airports (i.e., less than 5.0 million local originating passengers) in large air travel market areas comparable to Chicago:

- Boston area: New airline service was introduced at two secondary airports serving the Boston area – Providence, RI in 1996 and Manchester, NH in 1998. Prior to the introduction of this new service, Providence accommodated approximately 1,000,000 passenger enplanements, while Manchester enplaned approximately 540,000. By the end of the second year after the new service had been established, the new carrier accounted for approximately 500,000 annual enplanements in Providence and over 400,000 in Manchester. By 2002, enplanement activity had more than doubled in Providence and more than tripled in Manchester, largely attributable to the synergy created by the new entrant. Since the introduction of the new service, both airports have realized annual average growth rates significantly higher than the national average (approximately 14 percent and 25 percent through 2002, respectively). With respective regional market shares of 18 percent and 11 percent, these two secondary airports combine to serve nearly one-third of the local Boston market in 2002.
- Los Angeles area: New airline service was introduced at two secondary airports serving the Los Angeles area – Ontario, CA in 1985 and Burbank, CA in 1990. Now well established at these facilities, the new entrant airline accommodated approximately 1.7 million enplanements at each of the airports during 2002, accounting for over 55 percent of total enplanements at Ontario and over 70 percent of total enplanements at Burbank. With respective regional market shares of 10 percent and 7 percent, these two secondary airports combined to serve nearly 17 percent of the local Los Angeles market in 2002. More recently, Jetblue has added service at Long Beach (LGB), resulting in another secondary airport serving the Los Angeles area.
- San Francisco area: New airline service was introduced at San Jose – Mineta International Airport in 1993. In the year immediately prior to the introduction of the service, San Jose enplaned approximately 3.5 million passengers. By 1997, the new carrier had grown to enplane an additional approximately 2.0 million passengers annually. San Jose served approximately 23 percent of the local San Francisco market in 2002.

The study of these secondary airports appears to indicate that, with the introduction of new service, passenger demand tends to increase more rapidly than the overall growth in regional activity. In part, this rapid growth phase represents a transfer of activity from existing airports and/or air travel service providers to the new service. Also, the combination of new destinations, service offerings, and/or lower fares can serve unmet demand and/or stimulate latent demand for air transportation. Following this initial growth phase, subsequent growth rates are more consistent with continued growth in the regional air travel market. For the secondary airports analyzed above, by 2002, the new entrant carrier accommodated between approximately 1.0 and 2.0 million local passengers, and accounted for an average of

approximately 50 percent of total enplanements at these facilities. This is an increment that could be considered reasonable for new airline service at another regional airport.

South Suburban Airport Forecast. As presented earlier, aviation forecasts were prepared as a part of the ongoing South Suburban Airport (SSA) Tier 2 EIS.[24] For the purpose of comparison, the time period represented by the "DBO+10" projection appears to most closely relate to the O'Hare EIS analysis year of 2018 without interpolation. At the upper end of the feasibility envelope, the "DBO+10 high case" forecast estimates that SSA could accommodate approximately 2.5 million enplanements. This level of activity would represent approximately 7 percent of originating regional passengers by 2018.[25] Additionally, the "DBO+10 low case" forecast estimates that SSA could accommodate approximately 1.3 million enplanements; this level of activity would represent approximately 4 percent of originating regional passengers by 2018.[26] Therefore in either case, a proposed SSA would not likely function as a significant secondary airport for the region (greater than 10 percent of the regional share). While some of this could represent demand that would otherwise occur at O'Hare, it is also expected that much of this would represent demand unique to the SSA market area. This number of enplanements, assumed to be primarily local origin and destination, is reasonably consistent with the case history of several smaller secondary airports previously cited.

C.1.4 Conclusion Regarding Use of Other Regional Airports

Based upon the analysis contained in this section, a scenario was developed for the potential use of other regional airports that would be reasonable in relation to (1) data on airport shares in multiple airport systems, (2) the availability of capacity at airports in the Chicago area, and (3) the likelihood of airlines initiating service at available airports. From review of these data, it was concluded that a reasonable scenario would be one in which approximately 2.0 million originating passengers that would otherwise use O'Hare would be accommodated at one or more of the secondary airports, including a potential SSA. This conclusion is consistent with the historical experiences of several smaller secondary airports both across the nation and worldwide, and also fits within existing and proposed regional airport capacity.

Based upon an average of approximately 84 passengers per aircraft operation, the diversion of approximately 2.0 million originating passengers from O'Hare translates into a reduction of approximately 23,800 annual operations. At less than 2 percent of the total aircraft operations projected for 2018, this would not result in a material change in demand at O'Hare, and therefore the Use of Other Regional Airports Alternative, by itself, would not meet the stated purpose and need.

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[24] Draft - Projections of Aeronautical Activity for the Inaugural Airport Program South Suburban Airport, IDOT, May 11, 2004.

[25] Based on 2002 TAF, assuming approximately 34 million originating enplanements in the Chicago region in 2018, including ORD, MDW, MKE, RFD, GYY with a originating percentage of 50% for ORD, MDW, MKE and 85% for RFD and GYY.

[26] Based on 2002 TAF, assuming approximately 34 million originating enplanements in the Chicago region in 2018, including ORD, MDW, MKE, RFD, GYY with a originating percentage of 50% for ORD, MDW, MKE and 85% for RFD and GYY.